

Performance Certified Tested

# ICE EATER®

## PROTECTS your BOAT and DOCK from ICE

**First in Quality,  
Durability and  
Performance.**

**3 YEAR  
Limited Warranty**

★★★★★★★★★★  
Featuring a quick change  
power connection cord  
that allows for easy  
on-site replacement.  
New more efficient  
motors for lower  
energy consumption.

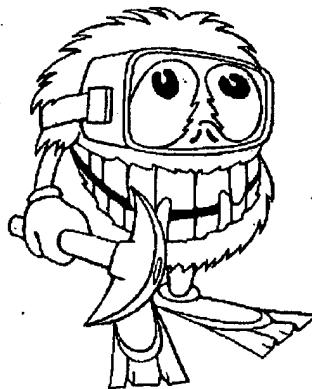
★★★★★★★★★★



**Leader In Ice Prevention Technology**

MADE IN USA

Manufactured by  
**THE POWER HOUSE**  
INC.



**ICE EATER®** is designed to prevent ice formation around boats, marinas, floating docks, piers, pilings, boat houses, bulkheads, horse, fish and duck ponds.

Ice Eater's propeller draws up warmer subsurface water and deflects it to the surface creating a constant circulation of warmer water that prevents ice formation. Ice Eater will melt existing ice. Just cut a hole and lower unit into place.

## DESIGN FEATURES

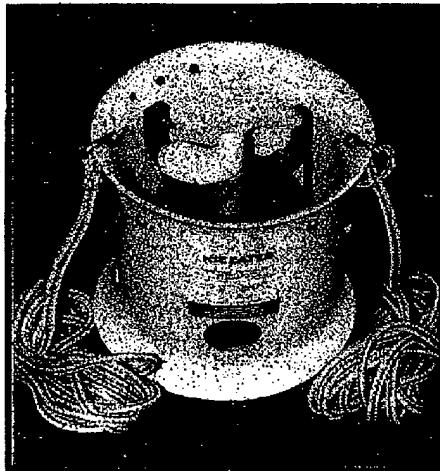
The design of the Ice Eater's venturi shroud (housing) with outwardly flared ends draws warmer water from greater depths than other conventional de-icers.

The shroud is suspendable below the surface either vertically or angled from vertical. A set of mounting holes at opposed positions on the flange allows the lines to be attached.

By moving one line at the top of the flange, directional flow is controlled. This venturi type design produces more water turbulence and controlled flow for maximum performance.

## MODEL P500

- 1/2 H.P. energy efficient high quality motor with 28 pounds thrust at 5.0 amps, 120 volt, one phase, 60 cycle.
- 25 foot quick change power cord.
- Two 25 foot x 3/8 hollow braided lines with shackles.
- Dimensions of shipping box 12 5/8x12 5/8x12 3/4 weight 38 pounds.



## MODEL P750

- 3/4 H.P. energy efficient high quality motor with 36 pounds thrust at 4.7 amps, 120 volt, one phase, 60 cycle, and 2.5 amps, 220 volt.
- 25 foot quick change power cord.
- Two 25 foot x 3/8 hollow braided lines with shackles.
- Dimensions of shipping box 14 1/2x14 1/2x16 1/8 weight 45 pounds.

- Ice Eater De-icers are custom designed and engineered for maximum performance. Our units are designed to agitate fresh or salt water at maximum efficiency in all climatic conditions.
- Our energy efficient Ice Eater's will agitate more water than any De-icer on the market today.
- We ship by U.P.S. or motor freight. Phone (410) 654-9700
- Buy the Best. Specify an "Ice Eater" today.

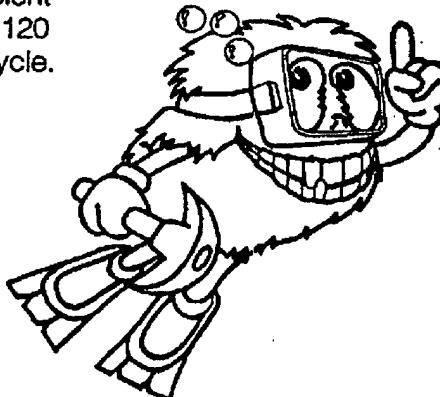
# MODEL SPECIFICATIONS

All models have the following:

- Motor housing is constructed of 16 gauge 304 stainless steel and bronze endbell for corrosion free operation in fresh or salt water. Motor exceeds NEMA specifications and is UL and CSA compliant, and C.E. certified.
- Motor shaft is 316 stainless steel, the best material for salt water application.
- Permanent split capacitor ensures quick high torque and smooth operation, while producing the highest efficiency of a single phase induction motor. Motor and capacitor are matched for ultimate performance.
- Internal, heavy duty, hard faced mechanical seal with stainless components immersed in dielectric lubricating fluid. Additional double lip shaft seal for extra protection.
- Stator motor windings have double impregnation of baked insulating varnish.
- Two heavy duty ball bearings provide support for the rotor while being cooled with dielectric type oil.
- Sacrificial custom designed zinc is provided for conditions where electrolysis may be present.
- Propeller is custom designed for maximum thrust and performance. Propeller screws on shaft for easy removal and replacement.
- Twenty-five feet of 16/3 water and oil resistant cord with three prong molded plug is standard. Additional length cord available: 50 and 100 feet.
- Heavy duty PVC custom brackets that attach motor to shroud. All stainless bolts and locking aircraft nuts are used.
- Performance certified tested at our facility for proper output and leaks before shipment.
- Best three year limited warranty in the marketplace.
- Comes complete, just open the box, remove and install.
- Optional thermostat custom design turns Ice Eater on when needed. Ideal for unattended application.

## MODEL P200

- 1/20 H.P. energy efficient PSC motor 1.5 amps, 120 volt, one phase, 60 cycle.
- 25 foot quick change power cord.
- Two 25 foot x  $\frac{3}{8}$  hollow braided lines with shackles.
- Dimension of shipping box  $12\frac{5}{8} \times 12\frac{5}{8} \times 12\frac{3}{4}$  weight 29 pounds.



★ For individual boats and slips or light ice..

★ *Very Low Power Consumption*

## MODEL P1000

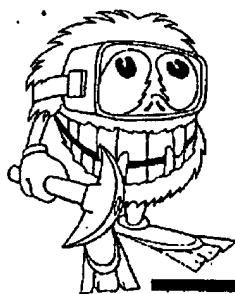
- 1 H.P. energy efficient high quality motor 115/220 volts, 7.0/3.5 amps one phase, 60 cycle.
- 25 foot quick change power cord.
- Two 25 foot x  $\frac{3}{8}$  hollow braided lines with shackles.
- Dimension of shipping box  $14\frac{1}{2} \times 14\frac{1}{2} \times 16\frac{1}{8}$  weight 50 pounds.

★ For large boats, marinas and heavier uses.

★ *Can be used in place of several smaller units*



**Also Available in 2 & 3 Hp  
Models for Commercial Applications**

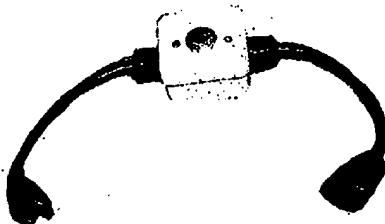


# ICE EATER® PARTS AND ACCESSORIES

**POWER HOUSE**  
INC.

20 Gwynns Mill Court  
Owings Mills, Maryland 21117  
(410) 654-9700  
1-800-243-4741  
(410) 654-9706 Fax

Member  
NEMA



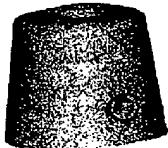
## ICE EATER THERMOSTAT

Heavy duty fixed thermostat, now available in 2 models:  
**Model FT2535:** On at 25° ( $\pm 3^\circ$ ) Off at 35° ( $\pm 3^\circ$ ). For areas that freeze at lower ambient air temperatures. (i.e. salt water)  
**Model FT3040:** On at 30° ( $\pm 3^\circ$ ) Off at 40° ( $\pm 3^\circ$ ). For areas that freeze quickly. (i.e. freshwater)



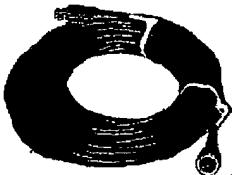
## SPARE PROPELLER

Custom designed propeller molded out of nylon for strength. Propeller screws on motor shaft.



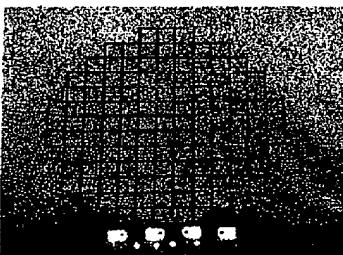
## REPLACEMENT ZINC

Ice Eater custom designed zinc fits over shaft of motor. Prevents electrolysis of Ice Eater components.



## POWER CORDS

Units available with 25 foot cord, optional 50 or 100 foot cord length. 30 amp twist lock plugs for power centers can be provided as an additional option.



## SCREEN ACCESSORY KIT

Helps prevent debris damage. Can be used on bottom or top or both as needed by area conditions.

## ENERGY EFFICIENT MOTOR

Custom designed stainless steel motor, housing  $\frac{1}{20}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1 Hp motors fit in existing housing.

## MOTORS-SPECIAL ORDERS

Motors are available in special voltages, 50 and 60 cycle. Call Factory for more information and special pricing.

## TESTIMONIALS

*"I have been using your P750 Ice Eater for the past 4 years and find it works more effectively than those I purchased from other manufacturers. The Ice Eater keeps a larger area free of ice and used up to 6Kw less power per day. Taken over a 4 month period this is a savings of 21,600 Kw."*

Frank L. Keefer  
Campbellford, Ontario Canada  
October 3, 1990

*"The unit performed exactly as I would hope. For us it is perfect for maintaining a 'fire hole' for our fire department."*

Jefferson Beach Marina  
St. Clair Shores, MI  
January 24, 1991

*"I told you I would send pictures showing how well your pumps melt ice. Unfortunately, they melted so much ice you cannot see the ice."*

Snug Harbor Marina  
Pentwater, MI  
March 27, 1991

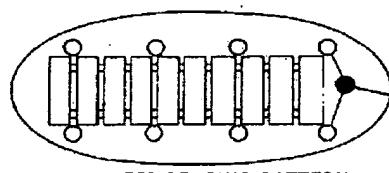
**Power House ICE EATERS** are currently in use from Maine to California, Canada to Texas. Power House equipment is also in use in Scandinavia, Northern Europe and Great Britain.

With over 15 years experience and the only PATENTED DESIGN AND THREE YEAR WARRANTY in the industry, Power House energy efficient ICE EATERS are your best protection against ice damage to boats, docks and piers.

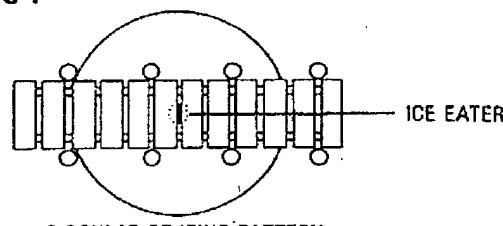
## APPLICATION

**PVC Housing design allows 4 different de-icing patterns.**

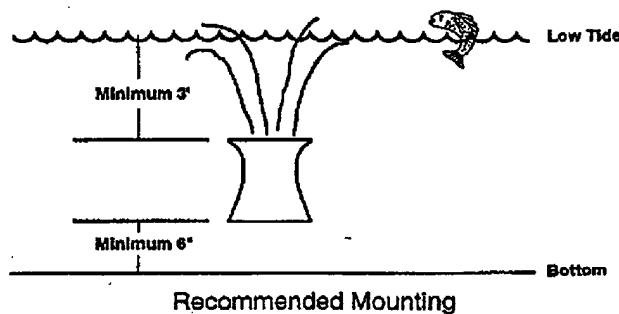
SPREAD MOUNTING ROPES APPROXIMATELY 6-8 FT.



ICE EATER  
Located  
at Head  
of Pier



CIRCULAR DE-ICING PATTERN



For engineering, design and layout assistance, call  
The Power House at 1-800-243-4741.

Member of the National Marine Manufacturers Association

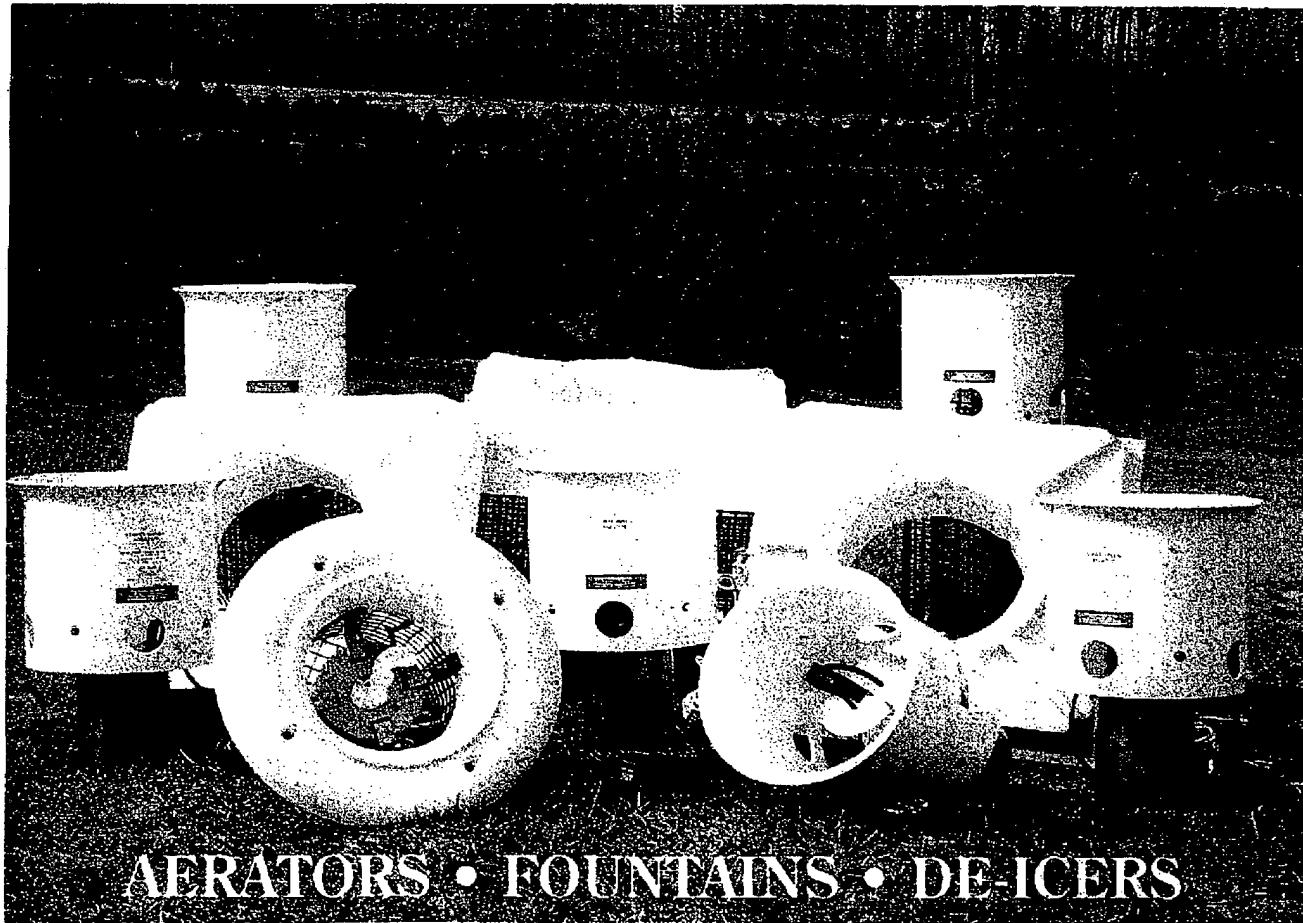
NO MORE OIL!!!  
Now with  
"Environmentally Friendly"  
Synthetic Dielectric Lubricating Fluid  
Non-Toxic • Biodegradable  
Non-Bioaccumulating

# THE POWERHOUSE, INC.

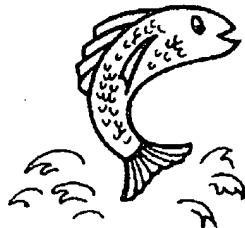
800-243-4741

[www.thepowerhouseinc.com](http://www.thepowerhouseinc.com)

PRODUCTS FOR AQUACULTURE & POND BEAUTIFICATION



AERATORS • FOUNTAINS • DE-ICERS



# THE POWER HOUSE

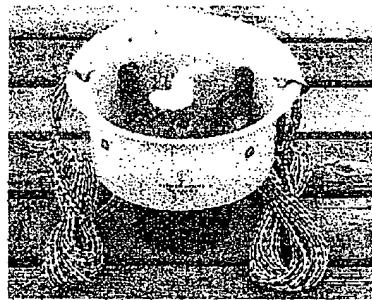
UNIQUE BY DESIGN – SUPERIOR IN PERFORMANCE  
FIRST IN QUALITY

## MODEL F0.05 AERATOR

USED IN HATCHERIES, REARING TANKS, MINNOW VATS, SMOLT AND FRY TANKS,  
SMALL RACEWAYS, AND HATCHING TROUGHS

- Tested At Auburn University and University of Maryland, USA
- Average standard aeration efficiency 3.59 Lb./O<sub>2</sub>/H.P./Hr.
- Standard oxygen transfer rate averaged 0.179 Lb./O<sub>2</sub>/Hr. (81 g O<sub>2</sub>/Hr.)
- Test results available upon request.

- 1/20TH H.P. Energy Efficient PSC Motor
- 1.5 AMP, 120 Volt, 60 Cycle
- Fresh and Salt Water Durability
- 304 Stainless Steel And Bronze Construction
- 25 Foot Power Cord Standard
- Completely Submersible
- Propellor Designed For Maximum Thrust
- Gallons Per Minute 291.4
- New Stainless Steel Shackles
- Lightweight And Portable: 28LBS - 12.6 Kilograms
- Comes Complete With Two 25 Foot Lines
- Cage Provided - 1 Inch Mesh
- Motor UL/CSA Recognized & CE Certified
- One Year Limited Warranty
- Ship U.P.S. Or Pallet Load Motor Freight
- See Back for Specifications

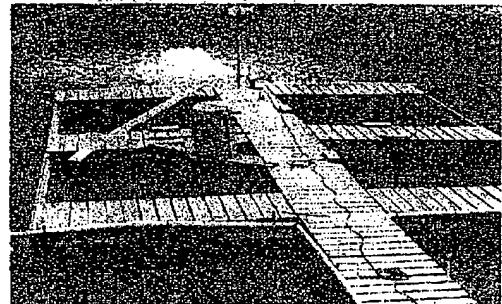


1/20TH H.P.

## MODEL F500 AERATOR

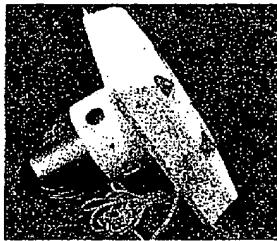
USED IN HATCHERIES, RACEWAYS,  
AND SMALL FISH CULTURE PONDS

- Increases Fish Density
- Excellent Water Circulation and Mixing
- Removes Carbon Dioxide
- Helps Prevent Algae Growth
- For Ponds of .1 to .5 Acres



1/2 H.P.

Performance Tested At Auburn University, and University of Maryland, USA



- 1/2 H.P. Energy Efficient PSC Motor
- 5.0 AMPS, 120 Volt, 60 Cycle
- Fresh and Salt Water Durability
- 304 Stainless Steel And Bronze Construction
- Completely Submersible
- Propellor Designed For Maximum Thrust
- Comes With 50 Foot Power Cord Standard
- Lightweight And Portable: 38LBS
- Comes Complete With Two 25 Foot Lines

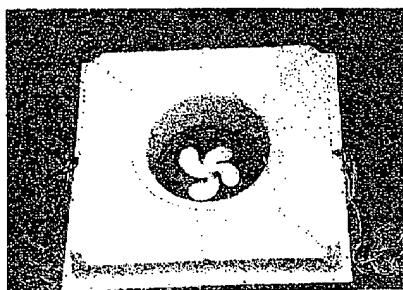
- Optional Cage - 1 Inch Mesh
- Motor UL/CSA Recognized & CE Certified
- One Year Limited Warranty
- Ship U.P.S. Or Pallet Load Motor Freight
- Shown Here With Heavy Duty ABS Float
- Average Oxygen Transfer Rate 2.606 Lb. O<sub>2</sub>/Hr.
- Gallons Per Minute 884.1
- See Back for Specifications

**EXCLUSIVELY FROM THE POWER HOUSE**  
**DUAL PROP AERATORS**

**MODEL F750DP**

**F750DP**

- 3/4 H.P. Energy Efficient PSC Motor
- 9.0 Amps, 120 Volts, 60 Cycle
- 4.8 Amps, 220 Volt, 60 Cycle
- Same Top Quality Construction As All Other Models
- Motor UL/CSA Recognized & CE Certified



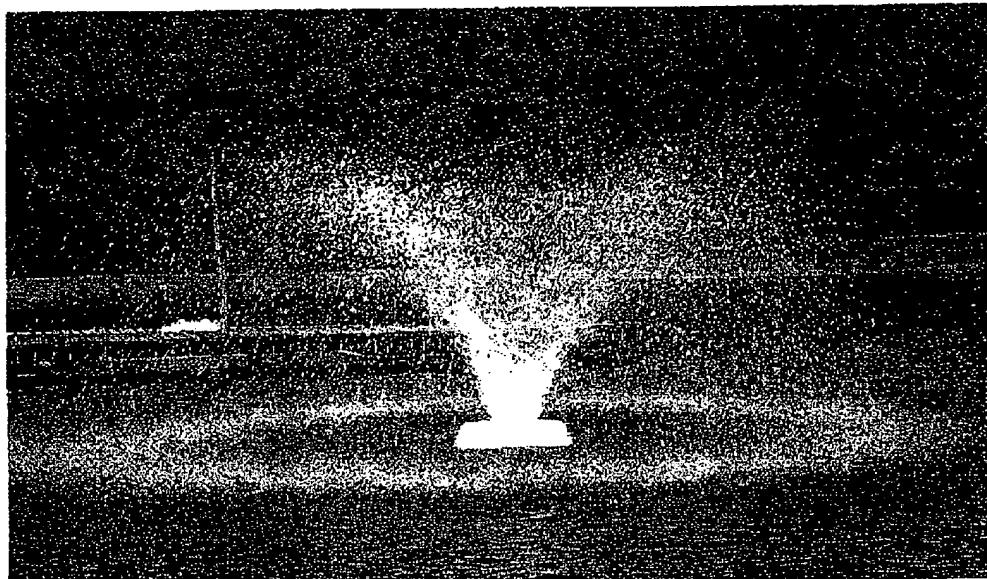
**MODEL F1000DP**

**F1000DP**

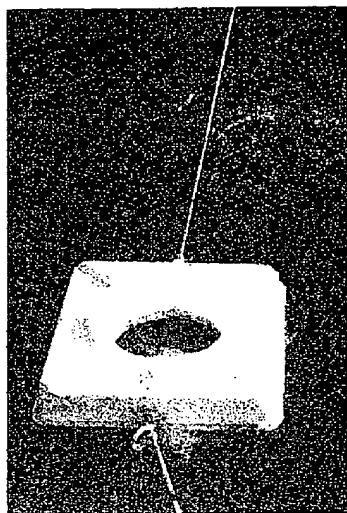
- 1 H.P. Energy Efficient PSC Motor
- 8.2 Amps, 120 Volts, 60 Cycle
- 4.1 Amps, 220 Volt, 60 Cycle
- Same Top Quality Construction As All Other Models
- Motor UL/CSA Recognized & CE Certified

We have refined two of our most popular models to provide a 25% increase in oxygen transfer with one of the highest aeration efficiency rates in the industry.

**MODEL F1000F FOUNTAIN**



This adaption of the reliable F1000 Aerator produces a fountain-like water stream, providing a visually pleasing effect while supplying substantial water flow and high oxygen transfer. This unit is designed for use in areas where the appearance of the pond or lake is as important as the need for efficient aeration. The pattern produced is comparable to many of the larger fountain units on the market but uses less than half the electric power needed by these units. The high volume spray resists misting and icing and covers an area 6' high by 21' in diameter. The Model F500F covers an area 4' high by 15' in diameter. Black float available upon request.

**NEW!!****FLOW KIT****Fits Models:****F500 thru F1000**  
(including Dual Prop)

- Easy Field Installation
- Generates Flow For Raceways, Large Ponds, Shellfish
- Extends Coverage Of Vertical Aerator When Used Together
- For High Thrust Circulation And Aeration

**MODEL F750****AERATOR****USED IN HATCHERIES,  
FISH CULTURE PONDS,  
AND FISH RESEARCH STATIONS**

- Average Oxygen Transfer Rate 2.956 Lb. O<sub>2</sub> / HR.
- Prevents Fish Stress And Mortality
- Increases Fish Production

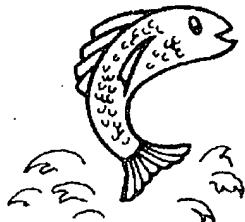


- Helps Prevent Algae Growth
- Eliminates Ice Formation
- 3/4 H.P. Energy Efficient PSC Motor
- 4.7 AMPS, 120 Volt, 60 Cycle
- 304 Stainless Steel and Bronze Construction
- Heavy Duty ABS Float

- Good Water Circulation With No Turbidity
- For Ponds of .5 to 1.0 Acres
- Propellor Designed For Maximum Thrust
- 50 Foot Power Cord Standard
- Motor UL/CSA Recognized & CE Certified
- Lightweight and Portable: 50 lbs.
- Optional Cage - 1 inch Mesh

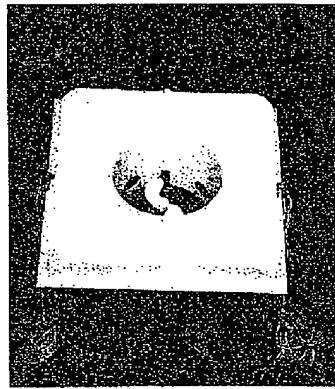
- Gallons Per Minute 987.5

- **Also Available:**  
3/4 H.P., 230 Volt, 1 Phase, 60 Cycle, 2.5 Amps  
3/4 H.P., 115/220 Volt, 1 Phase, 50 Cycle  
1/2 H.P. (rated), 380 Volt, 3 Phase, 50 Cycle
- See Back for Specifications

**MODEL F1000 AERATOR****NOW AVAILABLE IN SINGLE AND THREE PHASE****USED IN HATCHERIES, FISH CULTURE PONDS,  
AND FISH RESEARCH STATIONS**

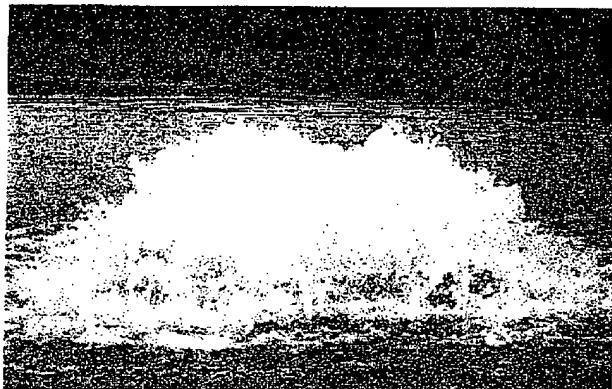
- High Oxygen Transfer Rate
- Good Water Circulation With No Turbidity
- Fish Culture Ponds Of .75 To 1.5 Acres
- 1 H.P. Energy Efficient PSC Motor
- 7.0 Amps, 115 Volt, 1 Phase, 60/50 Cycle or
- 3.5 Amps, 220 Volt, 1 Phase, 60/50 Cycle or
- 1.6 Amps, 220 Volt, 3 Phase, 60 Cycle
- 304 Stainless Steel And Bronze Construction
- Removes Carbon Dioxide
- Helps Prevent Algae Growth

- Prevents Fish Stress And Mortality
- Increases Growth Rate
- Fresh And Salt Water Durability
- Heavy Duty ABS Float
- Propellor Designed For Maximum Thrust
- One Year Limited Warranty
- Optional Cage - 1 inch Mesh
- 50 Foot 16/4 Power Cord Standard
- Motor UL/CSA Recognized & CE Certified
- Lightweight And Portable, 50 Lbs.
- See Back for Specifications



## MODEL F2000 AERATOR

USED IN CAGE CULTURE PROGRAMS,  
FISH CULTURE PONDS, AND  
FISH RESEARCH STATIONS



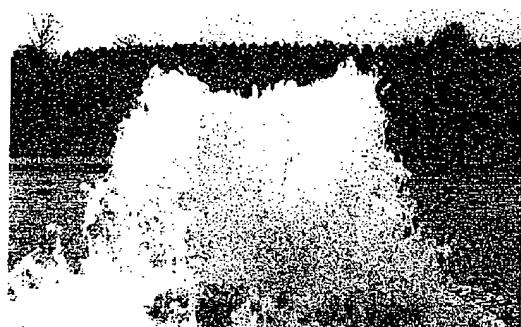
2 H.P.



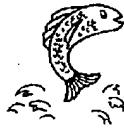
- 2 H.P. Energy Efficient Motor – Capacitor Start – Induction Run
- 12 AMPS, 230 Volt, 1 Phase, 60 Cycle, 1750 RPM
- 304 Stainless Steel and Bronze Construction
- 3 Blade Stainless Steel Propeller Designed For Maximum Thrust
- Heavy Duty ABS Float
- 50 Foot Power Cord Standard
- Weight 110 Lbs. – 49.5 Kilograms
- One Year Limited Warranty
- Average Oxygen Transfer Rate 10.078 Lb. O<sub>2</sub> / Hr.
- Gallons Per Minute 1283.6
- Motor UL/CSA Recognized & CE Certified
- For Ponds Of 1.0 To 2.0 Acres With Depth Of 10 Feet Or More
- Optional Cage – 1 Inch Mesh
- See Back for Specifications
- Now Available with Full Size or Compact Cages

## MODEL F3000 AERATOR

USED IN SHRIMP FARMING,  
LARGE FISH CULTURE PONDS,  
NET PENS AND CAGE CULTURE SYSTEMS



3 H.P.



Prototype installation of 3 H.P. Designed for adjustable aeration and flow generation.

- High Oxygen Transfer Rate
- Increases Stocking Densities and Growth Rates
- Excellent Flow Generation
- Superior Mixing Capabilities – Good Circulation With No Turbidity
- Prevents Thermal Stratification
- For Ponds of 3 To 5 Acres
- One Year Limited Warranty
- Fresh and Salt Water Durable
- Units Adjustable For Aeration, Flow Generation Or Combination Of Both.
- Motor UL/CSA Recognized & CE Certified
- Ship Motor Freight Only
- Also Available:  
230/460 Volt, 3 Phase, 60 Cycle, 7.6/3.8 AMPS, 3,450 RPM  
190/380 Volt, 3 Phase, 50 Cycle, 9.8/4.9 AMPS, 2,850 RPM

Thanks to FRA-MAR Farm, Hampstead, MD for the use of their pond for testing and many of the photos in this brochure.



## AQUACULTURE

Low dissolved oxygen levels and poor water quality can mean lower yields, reduced growth rate, and increased susceptibility to fish stress and disease. Fish farmers are finding improved water quality and increased production by using Power House aerators in raceways, ponds and sea pens.

Power House aerators are energy efficient and produce some of the highest oxygen transfer rates per horsepower/hour available. Also, these units help to maintain cleaner water, provide gentle circulation, and prevent thermal stratification... with no turbidity. Additional benefits include the ability to use the units as flow generators and to prevent winter fish kills.

Power House aerators are unique in design and superior in construction and performance. They are also suitable for both salt and fresh water use.

## AERATOR SPECIFICATIONS

- Unit shall be a \_\_\_\_\_ HP, \_\_\_\_\_ volt, \_\_\_\_\_ cycle, \_\_\_\_\_ phase vertical pump type aerator.
- Unit shall consist of motor assembly, heavy duty PVC shroud and heavy duty float with optional anti-fouling screen that surrounds the motor assembly.
- Motor assembly shall consist of motor housing, bronze endbell, electric motor, start/run components, seals and dielectric lubricating fluid. The motor housing shall be constructed of 16 gauge #304 stainless steel and the endbell shall be cast bronze for corrosion-free operation in either fresh or salt water. The electric motor, with matched necessary start/run components shall fit inside the motor housing, immersed in the dielectric lubricating fluid, with the shaft extending through the bronze endbell. The motor shall have stator windings with double impregnation of baked insulating varnish, and two heavy duty ball bearings to provide support for the rotor. The motor shaft shall be #303/#304 stainless steel (not plated); with motor shaft flinger to prevent sand and dirt from accumulating around the endbell. The assembly shall also contain an internal, heavy duty, hard faced mechanical seal with stainless steel components to keep assembly water-tight, and an additional seal pressed into the bronze endbell at the shaft opening to protect against sand and dirt abrasion.
- Unit shall come complete with \_\_\_\_\_ feet of water and oil resistant power cord.
- Heavy duty custom brackets will attach motor housing to shroud. All stainless bolts and locking aircraft nuts are to be used.
- PVC shroud may have side ports for maximum water flow.
- Motor housing and shroud assembly for 1/2 through 2 HP units shall rest in opening of custom designed float assembly without need of further mechanical attachment, for ease of installation and removal.
- Float assembly (for 1/2 HP through 2 HP units) shall be formed of 15 year UV resistant ABS plastic with custom designed opening to support shroud and motor assembly. Assembly shall come complete with two (2) eye bolts and two (2) 25' lengths of 3/8" propylene rope.

*The Power House is committed to providing the finest aerators available in the marketplace. As a result, specifications are subject to change without notice.*

THE  
**POWER HOUSE**  
 INC.

20 Gwynns Mill Court  
 Owings Mills, Maryland 21117  
**410-654-9700**  
**800-243-4741**  
**410-654-9706 Fax**

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**  
As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.